UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, DC 20460



OFFICE OF PREVENTION, PESTICIDES AND TOXIC SUBSTANCES Antimicrobials Division

October 22, 2002

SUBJECT: PRODUCT CHEMISTRY REVIEW OF: Dishwasher Magic

DP Barcode: 286246

Manufacturing-use [] OR

Reg. No. Or File Symbol: 74286-1

End-use Product [X]

An.

Adam Heyward PM Team No. 34

FROM:

Nancy Whyte, Chemist Na

Product Science Branch, CT Team

Antimicrobials Division (7510C)

THRU:

Karen P. Hicks, CT Team Leader

Product Science Branch

Antimicrobials Division (7510C)

THRU:

Michele E. Wingfield, Chief

Product Science Branch

Antimicrobials Division (7510C)

Product Formulation

Active Ingredient(s)

Citric acid

% by wt. 25.0%

BACKGROUND:

The registrant has submitted the final results of a one-year storage stability and corrosion characteristics study conducted to satisfy product chemistry registration requirements of Series 830.6317 and 830. 6320 Guidelines. The study was conducted using Good Laboratory Practices standards by the Product Safety Labs in Dayton, New Jersey from June 13, 2001 thru June 13, 2002. The study was contained in one document MRID No. 457765-01.

FINDINGS:

- Three containers of the same lot number of the product in high density polyethylene (HDPE) were put into storage for one year. Analysis of the active ingredient citric acid was made by High Pressure Liquid Chromatography (HPLC) at the initiation of the study. Thereafter, at 3 months, 6 months, and 12 months a sample was withdrawn from storage and duplicate samples were analyzed for the active ingredient.
- 2. At the same time the sample was withdrawn for chemical analysis, observations of any physical changes in the product such as clumping, phase separation, and discoloration were made.
- 3. Calculation of the mean and standard deviation were made by Gaussian statistics application.
- 4. The temperature of the storage area during the period was not provided in the study report. The Guideline specifies a storage temperature of 20° C or 25° C.
- At the end of the storage period there were no significant changes to the nominal concentration of citric acid.
- No physical changes were noted in the HDPE container throughout the storage period. There
 was no cracking, fogging, discoloration, or distortion of container or its lid.

RECOMMENDATIONS:

 The combined study report of storage stability (830, 6317) and corrosion characteristics (830,6320) is approved and will be filed with the other product chemistry data submitted for registration.